

Product Overview

NB7V32M: 1.8 V / 2.5 V, 10 GHz \pm 2 Clock Divider with CML Outputs

For complete documentation, see the data sheet.

The NB7V32M is a differential divide-by-2 Clock divider with asynchronous reset. The differential Clock inputs incorporate internal 50-ohm termination resistors and will accept LVPECL, CML and LVDS logic levels. The NB7V32M produces a divide-by-2 output copy of an input Clock operating up to 10GHz with minimal jitter. The Reset pin is asserted on the rising edge. Upon power-up, the internal flip-flops will attain a random state; the Reset allows for the synchronization of multiple NB7V32M's in a system. The 16mA differential CML output provides matching internal 50-ohm termination which guarantees 400mV output swing when externally receiver terminated with 50-ohm to VCC. The NB7V32M is the 1.8V/2.5V version of the NB7L32M 2.5V/3.3V and is offered in a low profile 3mm x 3mm 16-pin QFN package.

Features

- Maximum Input Clock Frequency > 10 GHz, typical
- Random Clock Jitter < 0.8ps RMS
- 30ps Typical Rise and Fall Times
- Differential CML Outputs, 400mV peak-to-peak, typical
- -40C to +85C Ambient Operating Temperature

Applications

- Test & Measurement, ATE

End Products

- Instrumentation, Networking

Part Electrical Specifications

Product	Compliance	Status	Type	Input Level	Output Level	V _{CC} Typ (V)	f _{Max} Typ (MHz)	t _{pd} Typ (ns)	t _R & t _F Max (ps)	Package Type
NB7V32MMNG	Pb-free	Active	Divider	LVDS	CML	2.5	10000	0.2	60	QFN-16
	Halide free			ECL		1.8				
				CML						
NB7V32MMNTXG	Pb-free	Active	Divider	CML	CML	2.5	10000	0.2	60	QFN-16
	Halide free			LVDS		1.8				
				ECL						

For more information please contact your local sales support at www.onsemi.com.

Created on: 4/19/2019